

For Research Use Only

# PDHB Polyclonal antibody

Catalog Number: 14744-1-AP

Featured Product

26 Publications



## Basic Information

### Catalog Number:

14744-1-AP

### Size:

150ul, Concentration: 400 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG6442

### GenBank Accession Number:

BC000439

### GeneID (NCBI):

5162

### UNIPROT ID:

P11177

### Full Name:

pyruvate dehydrogenase (lipoamide) beta

### Calculated MW:

39 kDa

### Observed MW:

34 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:6000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:200-1:800

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, bat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB : K-562 cells, human heart tissue, mouse skeletal muscle tissue, rat skeletal muscle tissue

IP : mouse heart tissue,

IHC : mouse skeletal muscle tissue,

IF/ICC : HeLa cells,

## Background Information

PDHB(Pyruvate dehydrogenase E1 component subunit beta, mitochondrial) is also named as PHE1B. The enzyme, which is found in mitochondria, is one of the component enzymes of the pyruvate dehydrogenase multienzyme complex (PDH). It catalyzes the first reaction of an oxidative decarboxylation sequence converting pyruvate to acetyl-CoA and CO<sub>2</sub>(PMID:3422424). Defects in PDHB are the cause of pyruvate dehydrogenase E1-beta deficiency (PDHBD)(PMID:15138885).

## Notable Publications

| Author         | Pubmed ID | Journal                | Application |
|----------------|-----------|------------------------|-------------|
| Zhen Cai       | 33022274  | Mol Cell               | WB          |
| Israa Sharkia  | 27871875  | J Allergy Clin Immunol | WB          |
| Henrick Horita | 29786648  | Proteomes              | WB          |

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

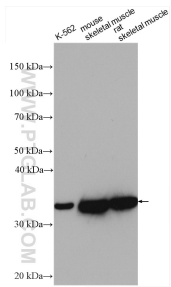
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

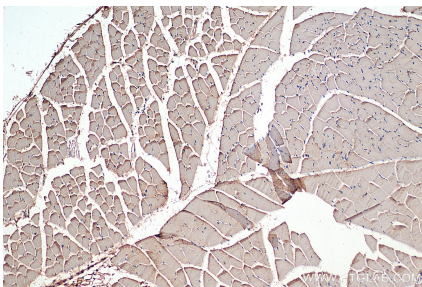
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

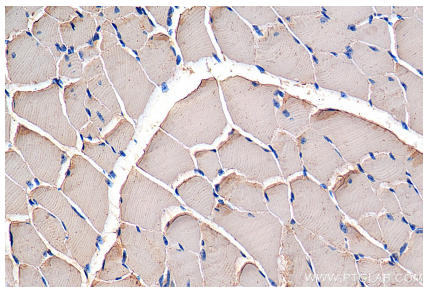
Selected Validation Data



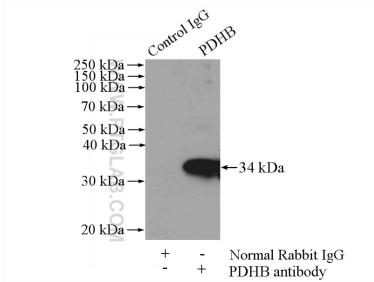
Various lysates were subjected to SDS PAGE followed by western blot with 14744-1-AP (PDHB antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



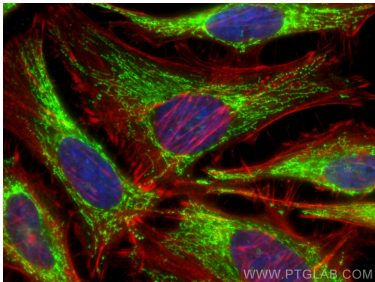
Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 14744-1-AP (PDHB antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 14744-1-AP (PDHB antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-PDHB (IP:14744-1-AP, 4ug; Detection:14744-1-AP 1:300) with mouse heart tissue lysate 4000ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using PDHB antibody (14744-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).